

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-4. (Canceled)

5. (Currently amended) A universal interface for accessing one or more information systems from a user device, the universal interface comprising:

an input converter for converting voice or tone inputs from the user device to commands;

an interface control module coupled to the input converter for receiving the commands from the input converter; determining one of the information systems to be accessed; converting the commands to commands recognizable by the information system; forwarding the converted commands to the information system; receiving data from the information system; and detecting the form of the data received from the information system, including whether the data received from the information system is speech or text data;

a speech-to-text routing switch coupled to the interface control module for receiving data from the information system and control data from the interface control module;

an output switch coupled to the interface control module and the speech-to-text routing switch for receiving speech from the speech-to-text routing switch, for receiving a control input from the interface control module, and for forwarding speech from the speech-to-text routing switch to the user device; and

a text-to-speech converter coupled to the output switch for receiving text from the interface control module, converting the text to speech, and forwarding the speech to the output switch to deliver the speech to the user device.

6. (Previously presented) The universal interface of claim 5, wherein the user device is a mobile telephone.

7. (Previously presented) The universal interface of claim 5, wherein the input converter comprises a voice input-to-command converter.

8. (Previously presented) The universal interface of claim 5, wherein the input converter comprises a tone input-to-command converter.

9. (Original) The universal interface of claim 5, wherein the interface control module integrates the data from the information system periodically or manually under user control, the interface control module further comprising:

- means for retrieving data from the information systems;
- means for determining antecedent comparable relevance of the data;
- means for updating all of the data to reflect the most recent data;
- means for linking relevant data; and
- means for exporting the linked data to the information system.

10. (Original) The universal interface of claim 9, wherein the information systems comprise two or more of the following:

- a calendar;
- a to-do list;
- an address book;
- voice mail;
- e-mail; and
- a web site.

11. (Previously presented) The universal interface of claim 5, wherein the interface control module integrates and synchronizes (i) a database of a personal information manager, (ii) a database residing on a personal digital assistant, and (iii) a database residing in the universal interface, the universal interface coupled to a computer on which the personal information database resides, wherein the computer further comprises:

a first input terminal for receiving data from the personal digital assistant; a second input terminal for receiving data from the universal interface;
a sensor for detecting a synchronization event triggered by a user requesting synchronization of the database of the personal digital assistant with the database of the personal information manager;
an electronic mail system coupled to the Internet; and
control logic coupled to receive the synchronized event from the sensor and to transmit data, over the electronic mail system, to the interface control module, wherein the control logic updates the data in each of the databases to reflect the most recent data entered into any database.

12. (Original) The universal interface of claim 11, wherein the synchronization information is sent to the universal interface in its entirety, in compressed form, or in incremental form.

13. (Original) The universal interface of claim 5, wherein the data sent from the information system to the universal interface is sent over the Internet.

14. (Original) The universal interface of claim 13, wherein the data sent is encrypted.

15. (Canceled)

16. (Original) The universal interface of claim 5, wherein the information system comprises at least one of: a dual tone multiple frequency (DTMF) driven voice mail system, a voice driven voice mail system, an electronic mail system, a web site, and a personal information manager.

17. (Previously presented) The universal interface of claim 5, wherein the universal interface determines at least one of the following:

whether the voice commands are being received from a user telephone;

the information system to be accessed;
whether the voice commands, after being converted to commands, are
recognizable to the information system;
whether the converted commands have been forwarded to the information system;
whether data has been received from the information system;
whether data from the information system is speech or text;
the state of the speech-to-text routing switch; and
the state of the output switch.

18. (Previously presented) The universal interface of claim 5, wherein the interface control module further comprises:

a translator coupled to the input converter for retrieving a model corresponding to the information system to be accessed and for converting the commands to commands recognizable by the information system.

19. (Canceled)

20. (Previously presented) The universal interface of claim 5, wherein the universal interface further comprises:

means for detecting a first language in which the inputs from the user device are received;

means for detecting a second language associated with the data received from the information system; and

means for converting the data received from the information system into the first language.

21. (Previously presented) The universal interface of claim 20, wherein the universal interface further comprises means for detecting more than one languages within a single fragment of data.

22. (Previously presented) The universal interface of claim 5, further comprising a resource manager for establishing conference bridges to an external telephone having a telephone number, wherein:

the interface control module detects, from the commands from the input converter, whether a conference bridge request has been made;

the interface control module retrieves the telephone number of the external telephone to establish the conference bridge; and

the interface control module forwards the telephone number to the resource manager; and the resource manager establishes a telephone connection with the external telephone.

23. (Original) The universal interface of claim 5, further comprising a facsimile manager for sending facsimiles to one or more facsimile machines, wherein:

the interface control module detects, from the commands from the input converter, whether a facsimile request has been made;

the interface control module retrieves a telephone number of a designated facsimile machine;

the interface control module forwards the data and the telephone number to the facsimile manager; and

the facsimile manager faxes the data to the designated facsimile machine.

24. (Original) The universal interface of claim 5, wherein the universal interface further comprises a pager manager for sending pager messages to one or more pagers, wherein:

the interface control module detects, from the commands from the input converter, whether a pager request has been made;

the interface control module retrieves data to be forwarded to the pager;

the interface control module retrieves a telephone number of a designated pager to which the data is to be forwarded;

the interface control module forwards the data and the telephone number to the pager manager; and

the pager manager forwards the data to the designated pager.

25-60. (Canceled)